

THE CLAIMS:

1. (Previously Presented) A method for the insertion of information to synchronize a destination node with a data stream transmitted from an entry terminal in a heterogeneous network, the heterogeneous network including at least one sub-network conveying packets of a first type and one basic network conveying packets of a second type, the entry terminal being connected to the sub-network, the sub-network being connected to the basic network by means of an entry node forming the packets of the second type from at least one sub-part of at least one packet of the first type, wherein the size of the useful information of packets of the second type is independent of the size of packets of the first type,

wherein, at the occurrence of at least one predetermined event, the entry node:

forms a synchronization packet of the second type such that the beginning of useful information of the synchronization packet corresponds to the beginning of the packet of the first type;

inserts a synchronization marker in the synchronization packet; and

modifies the size of a packet of the second type preceding the synchronization packet such that the end of the useful information of said packet of the second type corresponds to the end of a packet of the first type.

2. (Original) A method according to claim 1, wherein said predetermined event is reached at a predetermined instant from among a plurality of predetermined instants.

3. (Original) A method according to claim 2, wherein the plurality of predetermined instants succeed one another in a cycle with a fixed period.

4. (Original) A method according to claim 1, wherein said predetermined event is the reception, by the entry node, of a synchronization request.

5. (Previously Presented) A method according to claim 4, wherein a synchronization request is sent out by a node belonging to a group comprising:

a first destination node, to which there is connected a first destination terminal that has formulated a first request for connection with the entry terminal, to receive said data stream; and

a second destination node, to which there is connected a second destination terminal that has formulated a second request for connection with the entry terminal, to receive said data stream, after a connection has already been set up between the first destination terminal and the entry terminal for said data stream.

6. (Previously Presented) A method according to claim 1, wherein the entry node modifies the size of the synchronization packet of the second type in such a way that the sum of the modified size of the preceding packet of the second type and the

modified size of the synchronization packet of the second type is substantially equal to a normal size of a packet of the second type.

7. (Previously Presented) A method according to claim 1, wherein the entry node manages a mechanism for obtaining, after each occurrence of a predetermined event, a current distance, in memory, between a memorized position of a forthcoming start of a packet of the first type and a current position of a read pointer used for the building of the packets of the second type.

8. (Previously Presented) A method according to claim 7, wherein the entry node performs the following steps:

the entry node obtains said current distance;

if the current distance is equal to zero, the entry node generates and sends a synchronization packet of the second type for which the start of payload data corresponds to the start of a packet of the first type, this synchronization packet comprising a synchronization marker;

if the current distance is smaller than the normal size of the packet of the second type, the entry node generates and sends a truncated packet of the second type, called a preceding packet of the second type, whose reduced size is equal to the current distance, then generates and sends a synchronization packet of the second type for which the start of the payload data corresponds to the start of the packet of the first type, this synchronization packet comprising a synchronization marker; and

if the current distance is greater than or equal to the normal size of the packet of the second type, the entry node sends a normal-sized packet of the second type that is not a synchronization packet of the second type.

9. (Previously Presented) A method for the processing of information for the synchronizing of a destination node with a data stream transmitted from an entry terminal in a heterogeneous network, the heterogeneous network including at least one sub-network conveying packets of a first type and a basic network conveying packets of a second type, the sub-network being connected to the basic network by means of a destination node,

wherein the size of useful information of packets of the second type is independent of the size of packets of the first type,

wherein the destination node:

detects a synchronization packet of the second type among the packets of the second type conveyed by the basic network by means of a synchronization marker contained in the synchronization packet of the second type;

forms a synchronization packet of the first type from at least one synchronization packet of the second type, such that the beginning of the synchronization packet of the first type corresponds to the beginning of useful information of the synchronization packet of the second type; and

transfers the synchronization packet of the first type to the sub-network.

10. (Previously Presented) A method according to claim 9 wherein, following the transfer of the synchronization packet of the first type, the destination node:
forms packets of the first type out of packets of the second type associated with the data stream; and
transfers the packets of the first type formed on the sub-network.

11. (Previously Presented) A method according to claim 9 wherein so long as it has not detected a synchronization packet of the second type, the destination node swallows the received packets of the second type, without forming packets of the first type.

12. (Previously Presented) A node in a heterogeneous network, the heterogeneous network including at least one sub-network conveying packets of a first type and a basic network conveying packets of a second type, wherein the size of useful information of packets of the second type is independent of the size of packets of the first type, and wherein the node comprises:

forming means for forming a synchronization packet of the second type such that the start of payload data of the synchronization packet of the second type corresponds to the start of a packet of the first type;

inserting means for inserting a synchronization marker in the synchronization packet of the second type; and

modification means for modifying the size of a packet of the second type preceding the synchronization packet of the second type, such that the end of the useful

information of said packet of the second type corresponds to the end of a packet of the first type.

13. (Previously Presented) A node according to claim 12, wherein said forming means forms the synchronization packet of the second type at the occurrence of a predetermined event, said predetermined event being reached at a predetermined instant from among a plurality of predetermined instants.

14. (Original) A node according to claim 13, wherein the plurality of predetermined instants succeed one another in a cycle with a fixed period.

15. (Previously Presented) A node according to claim 12, wherein said forming means forms the synchronization packet of the second type at the occurrence of a predetermined event, said predetermined event being reception, by the node, of a synchronization request.

16. (Previously Presented) A node according to claim 15, wherein the synchronization request is sent out by a node belonging to a group comprising:

a first destination node, to which there is connected a first destination terminal that has formulated a first request for connection with an entry terminal, to receive said data stream; and

a second destination node, to which there is connected a second destination terminal that has formulated a second request for connection with the entry terminal, to

receive said data stream, after a connection has already been set up between the first destination terminal and the entry terminal for said data stream.

17. (Previously Presented) A node according to claim 12, wherein said modification means modifies the size of the synchronization packet of the second type in such a way that the sum of the modified size of the preceding packet of the second type and the modified size of the synchronization packet of the second type is substantially equal to a normal size of a packet of the second type.

18. (Previously Presented) A node according to claim 12, further comprising means for obtaining a current distance in memory between a memorized position of a forthcoming start of a packet of the first type and a current position of a read pointer used for the building of the packets of the second type.

19. (Previously Presented) A node according to claim 18, further comprising means for selective activation as a function of the value of the current distance obtained, such that:

if the current distance is equal to zero, the activation means activates means for generating and sending a synchronization packet of the second type for which the start of the payload data corresponds to the start of a packet of the first type, this synchronization packet of the second type comprising a synchronization marker;

if the current distance is smaller than the normal size of a packet of the second type, the activation means activates means for generating and sending a truncated

packet of the second type, called a preceding packet of the second type, whose reduced size is equal to the current distance, then activates means for generating and sending a synchronization packet of the second type for which the start corresponds to the start of a packet of the first type, this synchronization packet of the second type comprising a synchronization marker; and

if the current distance is greater than or equal to the normal size of a packet of the second type, the activation means activates means for sending a normal-sized packet of the second type that is not a synchronization packet of the second type.

20. (Previously Presented) A node in a heterogeneous network, the heterogeneous network including at least one sub-network conveying packets of a first type and one basic network conveying packets of a second type, wherein the size of useful information of packets of the second type is independent of the size of packets of the first type, and wherein the node comprises:

detecting means for detecting a synchronization packet of the second type among the packets of the second type conveyed by the basic network by a synchronization marker contained in the synchronization packet of the second type;

forming means for forming a synchronization packet of the first type from at least one synchronization packet of the second type, such that the beginning of the synchronization packet of the first type corresponds to the beginning of useful information of the synchronization packet of the second type; and

a transmitter for transmitting the synchronization packet of the first type to the sub-network.

21. (Previously Presented) A node according to claim 20, wherein said forming means forms packets of the first type out of packets of the second type associated with the data stream following the transmission of the synchronization packet of the first type, and wherein said transmitter transmits the packets of the first type formed on the sub-network.

22. (Previously Presented) A node according to claim 20, further comprising means for swallowing the received packets of the second type, without forming packets of the first type so long as it has not detected a synchronization packet of the second type.